DOCUMENT RESUME

ED 361 288 SP 034 539

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TITLE Staff Development Programs in Public Schools: Successful Staff Development Programs Including the Role of the Classroom Teachers and Administrators.
PUB DATE 93
NOTE 24p.
PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Administrator Role; *Delivery Systems; Delphi Technique; Elementary Secondary Education; *Faculty Development; *Inservice Teacher Education; Literature Reviews; Needs Assessment; *Program Development; *Public Schools; *Teacher Effectiveness; Teacher Role
IDENTIFIERS *Empirical Research

ABSTRACT

This paper presents a review of the literature, examines available empirical studies related to successful staff development programs, and provides recommendations to school administrators and teachers with respect to the establishment of effective programs. Staff development is defined as any inservice activity that can potentially increase an educator's effectiveness within the school system, and more specifically, any planned process of education and/or training which will benefit the teacher, student, and school system. Based on the literature review, the following recommendations are offered to school systems: (1) establish a viable staff development philosophy; (2) involve and encourage the cooperation of teachers and administrators; (3) establish a staff development committee comprised of volunteer teachers and administrators to find out what teachers know and what they need to know through the use of a needs assessment instrument or the use of the Delphi Technique; (4) establish an effective delivery system including inservice evaluations; (5) locate inservices in school buildings; (6) encourage teachers' peers to do inservices; and (7) give serious thought to the provision of quality time for inservice to take place. (LL)

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ED 361 288

STAFF DEVELOPMENT PROGRAMS IN PUBLIC SCHOOLS: Successful Staff Development Programs Including The Role Of The Classroom Teachers and Administrators.

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As the mission of public education becomes more complex and is under more scrutiny by the American public, it is evident that schools need to concentrate seriously on their approach to providing quality educational programs for the students served. As a result, school systems need to continually evaluate the system's approach to present curriculum strategies as well as planned curricular intervention. This evaluation should be enhanced by giving considerable thought to developing a staff development program that is a continuous element of the school district.

PURPOSES

The purposes of this paper are to (1) review the literature and examine the available research in the area of staff development, (2) examine the elements of successful staff development programs and (3) to recommend to teachers and administrators how schools can effectively develop staff development programs for individual school systems.

Although there are literally hundreds of articles available for study on staff development, most of them are not researched based. Rather, they are topics for discussion in educational journals or periodicals. PDK-PAR (1983) indicates that there are over 9200 listings in the ERIC files, however, most of them are nonempirical and serve very little purpose for inducing testable theory. The

PDK-PAR article refers to a study by Nicholson, completed in 1976 in which over 2000 published and unpublished articles on in-service related documents were evaluated. Nicholson drew the same conclusion; most documents are not researched based. As a result, it is difficult to draw conclusions based on empirical data. The report further states that researchers have done three kinds of research about in-service or staff development: (1) surveys, (2) governance studies and (3) research about training.

Therefore, this paper will deal with empirical studies when possible. Empirical data will be cited when it has been carefully examined and is useful for this study.

Staff development may be defined in many ways. For the purposes of this paper the definition used will be any in-service activities that can potentially increase an educator's effectiveness within the school system, and more specifically, any planned process of education and or training which will benefit the teacher, student and school system. Similar definitions are reported by Mohamed (1983). Mohamed also cites studies by Stoner and Goldestein which support the same general definitions of staff development.

As educational professionals, classroom teachers and administrators need to consistently address staff development. Like other professions, education continually has improved techniques and research that impacts the profession. The results of these new techniques and successful innovations must be disseminated to professional administrators and teachers if school systems are to improve their effectiveness. One of the most effective manners in which to accomplish this dissemination is through staff development.

TEACHERS AND ADMINISTRATORS

Where do school systems begin in the process of staff development? The literature and research are explicit on this topic. School systems interested in staff development must do the following: have teachers involved, do needs assessments, develop and bring in-service to the school site, and although there is not total consensus on this issue, have in-service done by teachers already in the system, not by outside consultants.

The most important element may be involvement by teaching staff. Brown, Harvey, Kilgore, Losh, and Mortensen (1985), surveyed 2172 teachers and administrators in Nebraska concerning staff development. The conclusions are evidence of the concern by teachers that they need to be involved in planning staff development activities. The results indicated only 29% of the teachers thought they were involved in staff development. The study also addressed a related problem of perceptions by administrators concerning teacher involvement. Administrators indicated teachers were involved nearly 90% of the time in some form while only 60% of the teachers felt they were involved any of the time. Obviously teachers and administrators need to communicate more than they are now doing concerning staff development.

The implications of this study are obvious. Teachers need to be involved in staff development and administrators need to address the problem of communicating with teachers about how best to approach staff development. Smith et.al. (1983) indicated teachers must be involved in staff development, as they are the ones who know their

own skill level, and thus would be aware of their needs. Gordon, (1974) also supported this concept when he indicates successful programs are developed by teachers.

If schools and administrators can be convinced staff development must be addressed with teacher involvement, the next logical step should be how to involve teachers. The research indicates the best manner in which to do this is through development of a staff development committee made up of teachers and administrators. (T.O. Barlow, personal communication March 15, 1986). Barlow, staff development director of the Educational Service Unit number 9 in Hastings, NE, states the establishment of a staff development committee of local teachers is the first and most important step in establishing a viable staff development system in school districts.

Brown, et. al. (1985) discovered approximately half of the schools that responded indicated staff development committees did exist in their schools. However, from other discrepancies between teacher and administrator perceptions in the same research one might wonder to what extent teachers were involved. Both teachers and administrators did feel teachers should play a more active role in the process. Evidently teacher involvement in a staff development committee process is not nearly as prominent as educators would hope. Discrepencies exist between administrators and teachers perceptions of the role played by teachers.

However, if the school district does decide to form such a committee, what is the best approach for organization? The logical conclusion is to seek volunteers. Volunteers for any purpose or

focus are persons who have a deep personal and professional interest and thus would be most valuable to a staff development committee.

This does bring the role of the administrator into focus. There must be a level of trust built so teachers can communicate with administrators about current educational trends or needs of the teachers. The teachers must not feel threatened by admitting they need assistance keeping current with new educational skills. Unfortunately, in some situations, the administrators would interpret this admittance as a professional weakness. Unscrupulous administrators could use this information for staff evaluation.

Although the focus thus far in this paper has been on teacher involvement in staff development programs, conversely, the effort must also involve administrators. When the school districts determine they are going to begin staff development it cannot be assumed it is only the teachers' responsibility. Mertens (1981) cites the widely known Rand Change Agent Study which reported survey research on 293 federal projects. One of the conclusions was that the administrators and teachers had to make joint decisions on teacher needs. The importance of such joint involvement by teacher and administrator is evident as school systems cannot develop staff development without joint cooperation between teachers and administrators.

The most effective level of administrator involvement is at the building level, directly involving the building principal. Building level administrators work with staff on a daily basis and should be communicating with staff on a regular basis about staff needs. Although staff development will often involve workshops, seminars or

other extended kinds of experiences, the principal will play other roles in staff development. PRA PKD (1983) reports that one of the most important roles of the building principal in staff development is the daily intervention which principals have with teachers. Often times, if the principal is effective, these casual conversations can be effectively geared towards staff development. The report also stressed that principals need to be involved in the planning of in-service activities.

The evidence of this involvement of the principal is often found in the literature. Sparks (1983) cites studies by Berman and McLaughlin, Lieberman and Miller, Stallings and Mohlman all of which reinforce the need for principal involvement. Kilgore (1983) cites the research in Sidney, Nebraska. This project involved professional staff members. The author observed an example of principal effectiveness when two principals were involved in a staff development project. In one case the principal stayed with the project through its entirety, and the other principal dropped out. The project was only successful where the principal stayed actively involved. In the other example the project failed as the teachers refused to work in the project.

NEEDS ASSESSMENT

At this point it should be fairly obvious that building administrators must play a vital role in staff development. What, then, is the next step?

The next step may be the most important, that of doing a needs assessment. If school systems can recognize there is a need for staff development and that teachers must be involved in the process, the next logical step is to determine what specific skills teachers need to improve their levels of competence. Burden (1983) concluded the 15 years prior to 1983 were less than satisfactory in conducting successful staff development programs for instructional improvement. He concluded staff development was poorly designed and did not meet teacher needs.

One reason these programs may have failed is because they neglected to address the different competency levels of teachers. Burden and Wallace (1983) state there are three stages of teacher development which must be considered when building staff development programs. In the first stage, teachers need assistance with the technical skills of teaching and need a structured, directive approach. In the second stage, teachers want to add variety in their teaching and like a collaborative approach. The third stage of teacher staff development focuses on more complex and cross-cutting concerns and these teachers prefer a team type arrangement with non-directive staff development.

These considerations make it fairly obvious that administrators must be cognizant of teachers' varying needs. The results of this study further indicate that principals or superintendents who somehow predetermine what is best for teacher staff development are making a serious mistake if they do not consider the different levels of teacher development. Principals, therefore, must heed this advice if

staff development and the staff development committee are to function effectively in individual school systems.

Mohamed (1983) cites a study by Monette which indicates staff development planners should consider the following: (1) who can best determine needs, (2) to what extent can needs pertain to staff and the system, (3) how to prepare for shifting needs and (4) consideration of relationship between needs and operational philosophy of the school district. Again, needs assessment is a vital concern as shown by this research.

The literature on staff development tends to support the opinion that staff development will not be successful unless a needs assessment is done. Smith (1982), Glatthorn (1981), Center for Vocational Education (1979), and Mohamed (1983) all concur on the importance of doing a needs assessment prior to any staff development activity.

Although it may vary from district to district, it is fairly obvious that teachers need to play a role, as they have at last some understanding and no doubt a good understanding of their specific needs. They should know their skills, as well as where they need help. Teachers may not know all of the new trends in education, therefore, the administrator should offer suggestions concerning these trends. The administrator, as instructional leader, needs to play an active role in staff development. The general role of the principal in staff development has already been addressed in this paper. Additionally, teachers should also have a good understanding of the other three items mentioned earlier concerning what staff

development planners should consider. Teachers need to be considered in all the aspects of staff development.

How can the goals be accomplished? The staff development committee should develop a survey which addresses the above items. The survey need not be complicated, however, it must assess what teachers perceive about the topic. Questions could be based around teacher perceptions on their roles in staff development and how they perceive staff development. At least the staff would feel involved, and at most the staff development committee could generate helpful and important information concerning staff development as perceived by teachers.

TEACHER ROLE

Further considerations of the teacher's role in staff development are continued in the following portion of the paper.

Beckner (1983) reports that his use of Needs Assessment of Educational Goals was administered to 5600 professional educators in 951 school districts. Although Beckner reported a number of results from his study, the most important for this paper was that there were significant differences in teacher perceived and administrator perceived needs for staff development. Over 1/3 of the items perceived as important needs by teachers were not perceived as needs by administrators. This study dealt with what was classified as the ideal and real situations concerning staff development. The Ideal was defined as how respondents perceived the importance and the Real as how well they were being performed.

This paper has addressed the concept of needs assessment related to staff development. A review of the literature would suggest there is no magic formula for conducting a needs assessment for staff development. Mosier (1985) agrees with this conclusion. He suggests a number of options such as interview, questionnaire, analysis, or questioning staff members as a method of conducting needs assessment. The most successful ways in which to conduct needs assessment will be considered later in the paper.

Staff Development committee work should eventually lead to in-service for teachers. Smoak (1981) surveyed 1270 teachers, 305 administrators and 35 teacher educators in an attempt to discover in-service needs. The purpose of the study was to discover skills needed by teachers on a daily basis. Smoak concluded teachers were the best source of identifying needs. More than 30 percent of the teachers in the study indicated skills had to be used by teachers and 30 percent of teachers felt skills needed to be considered important before skill attainment was important.

Concluding that needs assessment has to be done, that teachers and administrators both have to be involved and there are a variety of ways to do needs assessment, what are some of those ways? The next portion of the paper will deal briefly with how to conduct needs assessment.

HOW TO CONDUCT NEEDS ASSESSMENT

(T.O. Barlow, personal communication, March 15, 1986), Peace and Lovelace (1984) indicated one of the more successful manners in which

to conduct needs assessment is to have the staff development committees use the Delphi Technique. According to Barlow, the Delphi Technique involves obtaining individuals' reactions to specific questions or statements, combining these reactions and again asking these individuals to review and rank the findings until some kind of priority is determined. This is done through a written method, which avoids face to face confrontation thus reducing the threat of peer pressure. The biggest advantage to this technique is that it is an established process, successively used by the private sector, including industry.

Dalkey (1969) suggests three features of the Delphi Technique which are extremely advantageous: (1) anonymity - which reduces the influence of dominant individuals, (2) controlled feedback- which is not often found in group interaction, and (3) statistical group response- which reduces group pressure. Using this technique should provide the staff development committee with the kind of information it needs in order to effectively assess the staff development needs of teachers in a school building or school district. In order for staff development committees to effectively use the technique, the committee members will need training on the effective use of the model.

The staff development committee can devise its own needs assessment instrument or use one which can be found in the literature. For example, Glatthorn (1981) developed a needs assessment instrument for assessing district and school wide support for writing. An example is available for inspection in Appendixes 1 and 2.

The purpose of employing a needs assessment instrument can only be effective if the staff development committee knows as much about the school curriculum as is needed. Mosier (1985) succinctly suggests that prior to the solving of an education problem through staff development, the needs assessment instrument not only has to determine what must be done, but also has to assess what is already being done. D'Amico and Kershner (1984) reinforces the idea by indicating strategy must include an evaluation of existing conditions using survey and interview techniques. Glatthorn (1981) suggests the use of Curriculum Mapping as the best way to determine teachers current understanding.

Curriculum mapping is a linear graphic description or non-linear description which shows how various parts of the curriculum exist and function together. This mapping can be used to determine what in-service is needed by mapping where schools are in the curriculum. That may seem like an obvious conclusion, however, oftentimes little thought is given to the current curriculum when attempting to determine what needs to be done to improve instruction?

IN-SERVICE ACTIVITIES

When this portion of the process is completed, the staff development committee can determine the goals of staff development for the district. In-service, then, is the next logical step. Schambier (1983) indicates the goal of in-service is to improve the general quality of education for the participants.

What kind of in-service works best? Using the logic presented earlier in this paper, it would seem foolish to have the school district bring in educators who come for a "one-shot" performance, take their pay and leave. That, unfortunately, is often the kind of in-service that schools conduct. Administrators, as well as some teachers, feel they can rejuvenate staffs by having a motivational speaker appear at an in-service prior to school starting in the fall and that will neatly tie up the in-service for the year whether that kind of in-service was needed or not.

Sparks (1983) suggests that in-service through staff development can be thought of as a "nested process" that includes goals and context. Therefore, staff development takes place within a training process which emphasizes district goals and content. Reaching these goals can be accomplished by providing the proper kind of in-service.

Additionally, Kilgore (1984) states that research generally states staff development programs should be aimed at developing specific skills, emphasizing demonstrations and providing opportunities for staff to practice skills, receiving feedback and being useful in classroom situations. Again, the emphasis is on skills specifically needed by individual teachers, or departments for improvement of instruction.

DELIVERY SYSTEM

Once school districts have determined what individual staff member's needs are, the next step is to establish an effective delivery system for staff development. This usually is referred to

as in-service, as in the context of this paper, the need is for teachers already in the field teaching, not students preparing to teach or pre-service. The delivery system is as important as other elements of the process.

Mertens (1982) describes many elements of an effective delivery system. At the Teacher Center which Mertens directs, the 1500 workshops, courses, and seminars which were developed were targeted to meet specific requests. In-service was then made available to teachers as the need arose. This reinforces the concept of developing programs to fit teachers' individual needs, rather than some broad kind of program which might fit some teachers, but miss the majority.

Mertens cites a study by Mazzarella which suggests that "hands on" training allowed teachers to try new techniques and then ask for the kind of assistance teachers needed which would be most likely implementation of successful programs. The best training addressed the specific needs of individual teachers. Mazzarella also suggests that the one-shot pre-implement training was usually not helpful.

What kinds of activities would be successful for needs of individual teachers? Burden (1983) discusses delivery systems in detail and suggests there are many facets of in-service methods and modes for delivering staff development. Burden also suggests there is now enough research to identify the effectiveness of these components. Burden researched 200 in-service studies and concluded that school change and improvement is most likely to occur when all of the following components are evident:

- Presentation of theory, description of skills or teaching models;

- Modeling of skills or models of teaching;
- Practice in simulated classroom settings;
- Structured and open-ended feedback
- Coaching for application: hands on, in-classroom assistance.

This scenario differs dramatically from the concept frequently used in staff development and in-service; that of providing a well known educator to arrive at a pre-specified time to talk on some subject of his or her interest, but of interest to no one else. This model would coincide with other experts opinions. Mertens (1981) refers to the Rand study previously mentioned, which concluded that "Hands-on/Concrete" experiences for teachers are central to the in-service program. Mertens suggests that almost 60 percent of the teacher center programming (which she directs) addresses the "how-to" of instruction, particularly specific instructional approaches, etc. She also suggests that the important element is that over two thirds of this type of programming was targeted for at least one other dimension - a specific curriculum area, the needs of specific types of learners or teachers working in specific schools or grades.

The above reinforces the concept that staff development must serve the needs of individual teachers, not some preconceived notion by administrators of what teachers need.

After accomplishing the previous steps, the school must decide who is going to provide the in-service and when it is going to be delivered. Kilgore (1980) raises the question as to whether school districts have an in-service program or merely a series of random activities. Schools should have a planned series of activities which serve the needs of the district.

The school districts which have ongoing staff development and in-service activities are those which plan for the activities. Mazzarella (1980) suggests the best programs are ongoing - stretching throughout the school year - rather than a short workshop that is soon forgotten. Sparks (1983) concluded that scheduling for staff development activities consisting of a single session are largely ineffective. Most staff development programs which have an effect on teacher behavior are spaced over time. One staff development schedule which seems to be effective is a series of four to six three-hour workshops spaced one or two weeks apart Sparks (1983).

What is the conclusion, then, to be drawn from these studies? Apparently the staff development committees comprised of administrators and teachers must realize that schools need to address the needs of teachers. Additionally, they must realize that effective staff development and in-service is an ongoing process which tends to provide teachers with the proper in-service over an extended period of time.

Another question arises concerning delivery. Who should actually be the person who provides the in-service? Traditionally, schools have brought in professors from colleges to do in-service. Kilgore (1980) indicates schools should not allow college personnel to continue to control in-service. His study also indicates there is apparently some discrepancy as to whether outside personnel or local staff should provide in-service. School personnel tend to like other staff to provide the in-service. Mertens (1981) review of the research cites the Rand study, which indicates local teachers are the best source of in-service. Outside personnel were met with teacher

resistance. Burden (1983) concludes in-service must be school based. Again, the conclusion is that in-service cannot be a one-shot performance, but must be focused on the general need of the school.

SCHEDULING OF IN-SERVICE

The next problem is assessing when this in-service is to be done. This author has personal knowledge of other fields of endeavor where staff members are required to improve their skills. In the case of the telephone technical personnel, the telephone company sends the staff to Florida - all expenses paid - to learn the latest techniques. In another case recently hired employees of a national accounting firm are continually flown to Dallas, Houston and New York for in-service at company expense. In education, however, either very little is spent or teachers are required to spend money themselves.

Kilgore (1984) reports that few fiscal resources are generally allocated for in-service. The national average for in-service is approximately $65.00 per teacher per year. When contrasted with the amount rural school districts pay for just transporting school children to school, the figures are dismal. Schools which provide transportation can expend $500.00 or $600.00 per student per year just for getting school age children to school, but neglect to improve the school's most important resources.

Where is the best place to provide in-service and what is the best time frame? Studies are consistent in their conclusions. The most desired location, as reported by teachers, is to have the

in-service in the school district at local school settings. Mertens (1982) reporting on the Rand study indicates that study reiterated the best time is release time during the school day. The worst time is after school. Evidently teachers are tired then, and desire other activities rather than in-service. Interestingly enough, according to Mertens review of the Rand study, teachers would rather work on weekends or school holidays rather than after school.

There may be many reasons for disliking after school in-service. In addition to the conclusion that teachers are tired when they have completed their workday, teachers may need to be other places after work, such as caring for their own children, shopping, preparing dinner or planning for other evening activities. Presumably teachers can plan around weekends or school holidays easier than they can plan for time after school. This is an important consideration, and one which should be kept in mind by staff development committees and planners.

RELEASE TIME

Time constraints raises another equally important question. If staff development is important, and the available research indicates it is, then it is logical to assume that some importance will be attached to providing quality time for in-service to take place. Kilgore(1983) suggests that if staff development, via in-service, is to be done after school, evenings or on weekends the school is in effect saying the experience is not important. Actually what it seems to say is that teachers can give their own time for in-service,

but do not expect schools to pay for that time. Contrast this with the example cited above concerning a small local telephone company sending its technical employees to Florida to school. Learning new technology in phone installation and repair is apparently more important than improving educational opportunities for children and youth.

Brown et.al. (1985) in the study of 2172 teachers and administrators in Nebraska concluded that the current voluntary and mandatory staff development programs should occur primarily on in-service days and during release time. The current practice is to hold such activities after school. It is obvious that schools are not holding activities when they should be as after school has not proven to be a good time to hold such activities. Furthermore, it is obvious that schools, assuming they desire more effective staff development, need to give serious thought to what practices they are employing and what practices are desired in scheduling staff development.

CONCLUSION

The conclusion drawn from the review of the literature and the studies examined is obvious. Schools do need to give serious thought to establishing a viable staff development philosophy. The staff development work is best served when teachers and administrators work cooperatively. A staff development committee comprised of volunteer teachers and administrators seems to have the most merit.

The committee must find out what teachers already know, and what they need to know. This can be done through the use of a needs assessment instrument, or the use of the Delphi Technique. There are no doubt other ways to do needs assessments also. The important element in this portion of the model is to determine, with teacher assistance, what teachers need. The needs will obviously vary.

The delivery system is important, as what is brought to teachers must be carefully evaluated. Only in-service should be brought to the school which teachers desire. This means that one-shot performances directed at the entire building or district staff will probably be ineffective. The other important element of the delivery system is that the in-service works best when located in the school buildings, not when teachers are sent out-of-the district. Although there is conflicting data, it can be concluded that teachers generally like to be in-serviced by their peers.

It is evident that schools need strong staff development and in-service programs. If districts follow the conclusions reached by this paper, schools will be better places for children to be educated, as staff members will be continually growing educationally.

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BIBLIOGRAPHY

Beckner, Weldon and others. (1983). Needs in Smaller Schools of the United States: A Study. (Research Monograph No. 3). Lubbock, TX. Texas Technical University. Center for Rural Education. (ERIC Document Reproduction Service No. 238 626)

Brown, Robert D., Harvey, Anne, Kilgore, Alvah M., Losh Mary Ann., & Mortensen, Lynn. (1985). Staff Development Practices in Nebraska Public Schools: Report on a State-Wide Survey (Report from Partners in Educational Research). Lincoln, NE, University of Nebraska, Teachers College.

Burden, Paul R. and David Wallace. (1983). Tailoring Staff Development to Meet Teachers' Needs. Paper presented at the Mid-America Mini-clinic of the Association of Teacher Educators. Wichita, KS. (ERIC Document Reproduction Services No. 237 506)

Center for Vocational, Technical and Adult Education. (1979). Phase VIII. Final Report. Stout, WI. Center for Vocational, Technical and Adult Education. (ERIC Document Reproduction Services No. 182 427)

Dalkey, N.C. (1969). The Delphi Method: An Experimental Study of Group Opinion. (Memorandum RM-5888-PR) Santa Monica, California. RAND Corporation.

D'Amico, Joseph and Keith K. Kershner. (1984). One Answer to Staff Development in the Fast Turnaround Lane. Paper presented at the Annual Meeting of the American Educational Research Association. New Orleans, LA. (ERIC Document Reproduction Services No. 245 104)

Glatthorn, Allan A. (1981). Writing in the Schools: Improvement through Effective Leadership. Reston, VA. National Association of Secondary School Principals. (ERIC Document Reproduction Services No. 208 416)

Gordon, Lawrence. (1974). Patterns of Effective In-Service: A State of Summary of Research of Materials and Procedures for Changing Teacher Behaviors in In-Service Education. Tallahassee, FL. Florida State Department of Education.

Kiolgore, Alvah. (1980). In-Serve Education: The National Scene. Catalyst: The Journal of the Nebraska Council of School Administrators. Vol. 3. No. 3 pp. 1-9.

Kiolgore, Alvah. (1983). Curriculum Improvement Through In-Service. Paper presented at the conference of the Nebraska Council of School Administrators. Lincoln, NE.

Mertens, Sally. (1981). The Basics in In-Service Education: Findings from the Rand and Teacher Center Studies. Syracuse, NY. Syracuse University.

Mohamed, Dominic A. (1983). Identification and Verification of the Competencies Deemed Unique and Essential for Beginning Vocational Administrators in Florida. Final Report. Tallahassee, FL. Florida State Department of Education. (ERIC Document Reproduction Services No. 237 683)

Mosier, Nancy R. (1985). Training Needs Assessment: A Model for University-Industry Cooperation. Minneapolis, MN. University of Minnesota.

Peace, Betty and Bill Lovelace. (1984). Update of Secondary Vocational Office Data Processing Curriculum. Final Report. Denton, TX. North Texas State University. (ERIC Document Reproduction Services No. 257 945)

Phi Delta Kappa Practical Applications of Research (1983). Research: In-Service Education. Bloomington, IN.

Schambier, Robert. (1983). Staff Development: The Carrot or the Stick? Paper presented at the Annual Meeting of the American Association for Adult and Continuing Education. Philadelphia, PA. (ERIC Document Reproduction Services No. 237 658).

Smith, Brandon B. and others. (1982). Staff Development Procedures for In-Service Vocational Instructors: An Instrument Validation Study. Minneapolis, MN. University of Minnesota, Research and Development Center for Vocational Education. (ERIC Document Reproduction Services No. 219 533).

Smoak, Maria G. (1981). South Carolina Vocational Educator's Professional Development Needs Assessment. Columbia, SC. South Carolina Department of Education. (ERIC Document Reproduction Services No. 209 485)